IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND

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KAREN PETRO, ET AL	*	09-213
	*	
VS.	*	MAY 17, 2011
	*	**VOLUME II**
TOWN OF WEST WARWICK,	*	
ET AL	*	PROVIDENCE, RI
* * * * * * * * * * * * * * *	*	

HEARD BEFORE THE HONORABLE WILLIAM E. SMITH

DISTRICT JUDGE

(Daubert Hearing)

APPEARANCES:

FOR THE PLAINTIFF:	STEPHEN P. SHEEHAN, ESQ. Wistow & Barylick, Inc. 61 Weybosset St. Providence, RI 02903
FOR THE DEFENDANT:	BRIAN J. CLIFFORD, ESQ. DeSisto Law 211 Angell St. Providence, RI 02906
Court Reporter:	Anne M. Clayton, RPR One Exchange Terrace Providence, RI 02903

Proceeding reported and produced by computer-aided stenography

I N D E X

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17 MAY 2011 -- 9:35 A.M.

THE COURT: Good morning. So we're here in Petro versus the Town of West Warwick, the continuation of the Daubert hearing.

So let's have you all identify yourselves for the record.

MR. SHEEHAN: Your Honor, it's Stephen Sheehan appearing for the Plaintiff.

MR. CLIFFORD: Brian Clifford appearing for the Defendant.

MR. SHEEHAN: Your Honor, may we have permission to approach?

THE COURT: Sure.

(Bench conference off the record.)

THE COURT: All right. Mr. Clifford, you may proceed.

MR. CLIFFORD: Thank you, your Honor.

At the outset of this hearing, it was my understanding that there were three issues for the Court to address. There's the issue of whether or not the signs of Excited Delirium is reliable for expert testimony; whether Drs. Wetli and Mash were qualified to offer testimony on Excited Delirium; and finally, as far as Dr. Wetli is concerned, in preparing his expert testimony, is there an analytical gap between the data

that he reviewed and the conclusions that he ultimately drew. And it's further my understanding that those first issues have been conceded by Mr. Sheehan and that what we're here today to address is that third issue of whether there's an analytical gap between the data that Dr. Wetli reviewed and the conclusion that he drew.

So with your Honor's permission, I'll call Dr. Wetli to the stand.

THE COURT: That's fine.

CHARLES WETLI, M.D., first having been duly sworn, testified as follows:

THE CLERK: Please state your name and spell your last name for the record.

THE WITNESS: I'm Dr. Charles Wetli, W-E-T-L-I.

THE COURT: Good morning, Dr. Wetli.

THE WITNESS: Good morning.

THE COURT: And welcome.

And you may inquire, Mr. Clifford.

MR. CLIFFORD: Thank you, your Honor.

DIRECT EXAMINATION BY MR. CLIFFORD

Q. Dr. Wetli, if you could, please, could you explain your involvement with Excited Delirium?

A. Back in the late 1970's, cocaine was considered to be a very safe recreational drug. And in Miami at that time, which was the crossroads of cocaine trafficking,

we were seeing people dying from the use of cocaine.

One of the cases I encountered was a person who was intoxicated with cocaine and exhibited very bizarre behavior, which a psychiatrist pointed out to me was what they called Excited Delirium or agitated delirium, which is the first time I had heard about this.

The psychiatrist was Dr. David Fishbain, and we actually wrote the case up and submitted it as a report to an emergency medicine journal. Over the next several years of about five years, after that, I began to see the same syndrome appearing in recreational cocaine users. The first case was a body packer, a person who swallowed condoms filled with cocaine from South America.

But as I began to see these same cases occurring in recreational cocaine users, they all had the same characteristics of behavior, all were associated with sudden death shortly after being restrained. I went back to Dr. Fishbain and said: To me these look the same, what do you think. And he concurred and that's when we reported the series of cases in the Journal of Forensic Sciences, I believe it was 1985.

Since then, I have been looking at cocaine-related deaths and in particular cases of Excited Delirium ever since that time.

Q. Is this involvement reflected in your CV?

A. It is reflected in my CV as far as the publications are concerned, not as far as the various cases that I have studied, testified on and so forth.

MR. CLIFFORD: Very well.

Your Honor, with your permission, I'd like to admit Dr. Wetli's CV.

MR. SHEEHAN: No objection.

THE COURT: All right. We'll make that Exhibit 1.

(Defendant's Exhibit 1 admitted in full.)

Q. Dr. Wetli, what is the accepted methodology for determining the presence of Excited Delirium?

A. The diagnosis of Excited Delirium is based upon the behavior of the individual. It is a purely behavior diagnosis. It has certain other features associated with it, such as the various causes of Excited Delirium, but the syndrome itself is based on the behavior of the individual.

Q. What are some of those behaviors?

A. The behaviors, basically, the person is in fact delusional. They have -- it's a transient mental defect where they have lack of perception of the environment and inappropriate behavior with it. It is characterized by usually very violent behavior with

unexpected strength. It is frequently accompanied by hyperthermia. Many individuals have a propensity to smash glass objects such as mirrors and windows. Inappropriate disrobing is a frequent component of it. Frequently, profuse sweating.

Characteristically, they are completely impervious to any pain compliance techniques such as the use of electronic control devices, pepper sprays, baton strikes and what have you. And once they, in fact, are restrained, generally after a prolonged struggle, they will either recover from this in a hospital, generally within 24 hours, or they suddenly lose all vital signs within a few minutes after being restrained. If they are successfully resuscitated after their loss of vital signs, they invariably die within three to five days of the multi-organ failure.

Q. Are there any particular postmortem indications?

A. No. The autopsy itself is essentially negative. It's not a diagnosis of exclusion, as I said before. It is based upon the behavior of the individual. The autopsy findings in general are characteristically negative and do not show you a cause of death.

In other words, serious injury has been excluded such as a punctured lung or a puncture from part of a fractured rib, that type of thing has been excluded.

And likewise, an active significant disease process has also been excluded as a direct cause of death anyway.

Q. For the present case, what did you do to prepare your opinion?

A. Basically, I reviewed numerous documents. Did you want me to summarize these?

Q. If you will, please.

A. The investigative narrative reports of the West Warwick Police Department; investigative narrative of the Rhode Island State Police; medical/legal death investigator report by the Medical Examiner's Office; the autopsy report along with toxicology and chemistry reports done postmortem, including various notes and diagrams that were in the medical examiner case file; the Rhode Island State Police photographs of the scene and of Mr. Jackson at the hospital and at the autopsy; the medical examiner autopsy photographs; Plaintiff responses to request for production of documents; EMS ambulance run report; Kent Hospital Emergency Department record, which I believe also included the fire rescue unit response to Mr. Jackson.

I reviewed multiple psychiatric records, interview statements of numerous individuals. Did you want me to list these?

Q. No. That's sufficient, I think.

A. And then depositions with exhibits of numerous individuals. Basically, how I -- materials I review to issue my report and come to my conclusions.

Q. And what conclusions did you ultimately draw?

A. That, basically, my analysis indicated Mr. Jackson had two processes going on. One was he had significant heart disease. His heart was significantly enlarged. He was an obese man, and he also had some fairly -- I think stenosis or narrowing of one of his major coronary arteries. This on top of a full stomach of one liter of material in his stomach at a time following a violent struggle would be very consistent with a sudden cardiac death.

He also had many of the signs and symptoms of Excited Delirium, the agitated behavior, the marked increase in strength, the being now impervious to pain compliance techniques, in this particular case the baton strikes as well as the application of pepper spray directly to the face, unintelligible muttering and lack of shall I say cooperation with the police in the sense that he did not seem to be responding to them appropriately. So all of these would be indicative of Excited Delirium.

If the death was due to sudden cardiac death basis of its own just because of the heart disease, I

would expect that his terminal heart rhythm would have been ventricular fibrillation. As forensic pathologists, we see ventricular fibrillation almost invariably as the result of primary cardiac disease, sudden death from a cardiac disease.

In cases of Excited Delirium, the death occurs shortly after being restrained, not during the time of the struggle but shortly after being restrained and the terminal rhythm is one of asystole, A-S-Y-S-T-O-L-E, which basically means there is no electrical or mechanical activity of the heart itself. It's just suddenly like flipping a switch and the heart comes to a sudden standstill, and that's what we had here.

So my conclusion is basically that Mr. Jackson died from the syndrome of Excited Delirium and that was due to his schizophrenia, his underlying mental illness, and he died with the heart disease but not because of it.

Q. Did Mr. Jackson have all of the signs and symptoms associated with Excited Delirium?

A. No, he did not.

Q. Could you explain why not.

A. There are two reasons. First of all, in any medical syndrome, not every person develops all the signs and symptoms of any disease process, whether it's

rheumatic fever, heart disease, no matter what. Not everybody has signs and symptoms, all the possible signs and symptoms that could be associated with the syndrome.

Secondly, in the case of Mr. Jackson, he was a little bit unusual in that the police were responding to an alleged incident of sign vandalization. They were not responding, as is more frequently the case, to a person who is exhibiting bizarre behavior and encountering a person in that situation. By bizarre behavior, I mean somebody who's totally naked, smashing windows, screaming and yelling through the neighborhood.

Police were called for that scenario versus the one with Mr. Jackson, where they saw somebody in an area where there was a suspicion of a crime being committed, they encountered Mr. Jackson and then the violence precipitated at that point, which meant that he did not have sufficient time during this particular scenario to develop more of the signs and symptoms that would be typical for Excited Delirium.

Q. Okay.

A. In other words, the police encountered Mr. Jackson at the very beginning of the syndrome as opposed to in the middle of it.

MR. CLIFFORD: Very well. Your Honor, I have nothing more.

THE COURT: I'm sorry?

MR. CLIFFORD: I have nothing more.

THE COURT: Thank you.

Mr. Sheehan.

MR. SHEEHAN: Your Honor, just to clarify the remarks by my brother at the beginning of his presentation, with respect to Dr. Wetli, there is no objection to either the scientific sufficiency of Excited Delirium as a diagnostic entity or his qualifications.

With respect to Dr. Mash, that second point of qualifications has not been waived by the Plaintiff.

THE COURT: Thank you.

CROSS-EXAMINATION BY MR. SHEEHAN

Q. Good morning, again, Doctor.

A. Good morning.

Q. How are you?

A. Good.

Q. Doctor, you're testifying today in your capacity as a forensic pathologist, correct?

A. Correct.

Q. And first and foremost, forensic pathologists are physicians. Do you agree with that?

A. Yes.

Q. The understanding of medicine is fundamental to the practice of forensic pathology. Do you agree with that?

A. Yes.

Q. One of the fundamental tasks of a physician is diagnosis. Do you agree with that?

A. Correct.

Q. Doctor, do you agree that a definition of "diagnosis" that is accurate is the determination of the nature of a case of disease?

A. I'm sorry. I don't understand your question.

Q. Sure. Doctor, you're familiar with Dorland's Medical Dictionary, are you not?

A. Yes.

MR. SHEEHAN: Your Honor, with the Court's permission, I'd like to give the witness a copy of my exhibit so I don't have to go back and forth.

THE COURT: That's fine, yes.

MR. SHEEHAN: Doctor, these are all numbered.

Q. Referring to Exhibit 20, the excerpt from Dorland's Medical Dictionary, there's a definition of "diagnosis." Do you see that?

MR. SHEEHAN: May I approach, your Honor?

THE COURT: Yes.

A. Yes.
Q. And the first two definitions are the determination of the nature of a case of disease, and the second is the art of distinguishing one disease from another. Have I read that correctly?
A. Yes.
Q. Do you agree with those definitions for diagnosis?
A. I'm not sure what the first one means. Determination of the nature of a case of disease, I don't know what that means.
Q. Okay. How about the second one, the art of distinguishing one disease from another?
A. Yes.
Q. Okay. Now, the primary method that physicians use to distinguish one disease from another is the differential diagnosis, correct, Doctor?
A. Well, that doesn't distinguish it. That just lists the possibilities of the various things a person could have based upon the signs and symptoms that are known at that particular time. Usually, the differential diagnosis is made upon first examining the patient and then various things are eliminated or confirmed in the subsequent workup.
Q. Sometimes physicians use the term "differential diagnosis" to encompass both the initial listing of the

diseases that are compatible with the signs and symptoms and the ensuing process of ruling in and ruling out; is that correct?

A. Exactly. That's the way the process works.

Q. Okay. So using differential diagnosis to encompass both those elements, first the listing and then the ruling out, you accept that is the primary method that physicians use to distinguish one disease from another?

A. Well, ruling out and ruling in. Both together.

Q. But the answer, therefore, is yes?

A. Yes.

Q. Okay. Now, you believe that Excited Delirium caused Mr. Jackson's heart to stop pumping?

A. Correct.

Q. You, therefore, believe that he suffered a cardiac arrest from Excited Delirium?

A. Correct.

Q. You are aware that the Medical Examiner's Office in Rhode Island conducted an autopsy of Mr. Jackson; is that correct?

A. Correct.

Q. And that was performed by a forensic pathologist by the name of Dr. Peter Gillespie, correct?

A. Correct.

Q. Now, you disagree with his opinion concerning the cause of death, correct?

A. Correct.

Q. His opinion was that Mr. Jackson died as the result of ischemic heart disease following the physical altercation, correct?

A. Correct.

Q. And the cause of death he gives is sudden death complicating ischemic heart disease following physical altercation with police in a schizophrenic person, correct?

A. Correct.

Q. And you disagree with that as the cause of death?

A. Correct.

Q. Now, he also classified his death as a homicide, correct?

A. Correct.

Q. And in this case, all homicide means is the taking of one's life by another?

A. Correct.

Q. Without raising the issue of whether that was justified or not?

A. Correct.

Q. So you understand that Dr. Gillespie's opinion is that Mark Jackson died from a sudden unexpected cardiac

death?
A. From cardiac disease, yes.
Q. From cardiac disease?
A. Correct.
Q. In other words, you and Dr. Gillespie both believe that he died from a cardiac arrest. You believe it was due to Excited Delirium; it's Dr. Gillespie's opinion that it was due from cardiac disease?
A. That's exactly right.
Q. Now, shall we use the term "sudden death from cardiac disease" to encompass that opinion I've just described for Dr. Gillespie and to differentiate it from your opinion?
A. Yes. Can I just clarify one thing? The mechanism of death would be virtually the same. In other words, the sudden cessation of cardiac function. It's the cause of death where we differ.
Q. Thank you. Many conditions can cause sudden cardiac death?
A. Correct.
Q. One of which is trauma?
A. Yes.
Q. And obviously, that's not involved here?
A. Correct.
Q. There are a number of non-traumatic causes of

sudden cardiac death, correct?

A. Correct.

Q. The largest category of those is due to primary cardiac disease?

A. Correct.

Q. And it's called "primary" because the cardiac arrest starts with a disease process in the heart or directly affecting the heart?

A. No. It's a disease process involving the heart itself. You have other disease processes outside the heart which can also affect the heart, but if you're saying "primary," by that you mean that it's a primary disease of the heart muscle or of the blood vessels or other structures inside the heart.

Q. Right. And you understand that Dr. Gillespie's opinion is that the cause of Mr. Jackson's sudden cardiac death was primary cardiac disease?

A. Correct.

Q. Now, there are also conditions outside the heart that can cause sudden cardiac death?

A. Sure.

Q. One of which is your opinion happened here, Excited Delirium?

A. Correct.

Q. And those are called secondary conditions?

A. Correct.

Q. Now, Doctor, you know that a great many people die every year from sudden cardiac arrest?

A. That's very true.

Q. Doctor, if you would just turn to Tab 23, which is an extract from the emergency medicine text by Dr. Rosen or rather edited by Dr. Rosen. And referring you to the page that's number 36 and there's a caption "Epidemiology." Do you see that?

A. Yes.

Q. In this paragraph, it's stated that of the two million annual non-traumatic deaths in the United States in 1992, 670,000 will occur suddenly. Do you see that?

A. Yes.

Q. And there's a statement: Of these, 500,000 will be attributed to cardiovascular disease and the remaining 170,000 to non-cardiac causes. Do you see that?

A. Yes.

Q. Do you have any reason to disagree with those figures, Doctor?

A. No.

Q. From the epidemiologic point of view?

A. No, I see no reason to dispute it. That's

probably abut right, just based on medical examiner experience.

Q. Okay. Now, do you have a reliable estimate from the number of deaths each year from Excited Delirium syndrome?

A. No.

Q. Is it more than 200?

A. I wouldn't have the faintest idea.

Q. Doctor, is it less than 100?

A. I don't know.

Q. Would you agree that it is a small fraction of the total number of sudden cardiac deaths each year?

A. Absolutely.

Q. A very small fraction, Doctor?

A. Correct.

Q. Doctor, would you be surprised if there were a thousand deaths per year due to -- I'm sorry, a thousand deaths from sudden cardiac arrests per year due to primary cardiac disease for every one death to Excited Delirium Syndrome?

A. That would not surprise me, no. I don't know where you get the figures for that, but I think what you're basically getting at is that Excited Delirium deaths are relatively unusual, and I would agree with that, yes.

Q. And sudden death from primary cardiac disease is extremely common?

A. Yes, it is.

Q. Doctor, in your report, which is at Tab 21, on page two -- I'll give you a moment, Doctor. I'd like to draw your attention to a paragraph.

A. Okay.

Q. There's a middle paragraph that starts "Mr. Jackson was obese"?

A. Correct.

Q. It states, quote: Mr. Jackson was obese, had an enlarged heart, significant coronary arteriosclerosis, had approximately one liter of food in his stomach and had been in a violent struggle shortly before he was found without vital signs.

Have I read that sentence correctly?

A. Yes, you have.

Q. Then the next sentence starts: Such a scenario, correct?

A. Yes.

Q. The scenario you're referring to is your prior sentence?

A. Correct.

Q. And you state: Such a scenario has all the ingredients for sudden unexpected cardiac death,

correct?

A. Correct.

Q. And that sentence, the phrase "sudden unexpected cardiac death," you're meaning to refer to sudden cardiac death due to primary cardiac disease?

A. That is correct.

Q. There's no question in your mind, Doctor, that obesity is a risk factor in an individual such as Mr. Jackson for sudden cardiac death from primary cardiac disease?

A. Correct.

Q. You note that he had an enlarged heart, correct?

A. Correct.

Q. The term for that is cardiomegaly?

A. Correct.

Q. And you note that Dr. Gillespie weighed the heart as 520 grams?

A. Correct.

Q. And you note the predicted normal for Mr. Jackson's height is 349 grams?

A. Correct.

Q. When you performed autopsies, Doctor, before your retirement from clinical forensic medicine, you used a table to determine what was the normal predicted heart weight for an individual?

A. I still use that table, yes.
Q. Okay. You get it from the Mayo Clinic?
A. Correct.
Q. And that predicts normal based on the height of the individual?
A. There are two tables. One is the weight predicted for the height, and the other is predicted for the weight. We generally use the one for the height because the weight would be artificially increased because obesity means your heart works harder and becomes enlarged secondary to obesity so it's a false number.
Q. All right. So you generally use the one based on height?
A. Correct.
Q. And using that, what we have here is Mr. Jackson's heart was 50 percent larger than normal?
A. Correct.
Q. You have written, Doctor, that sudden -- I'm sorry, that an enlarged heart increases the risk of sudden cardiac death from primary cardiac disease?
A. Most definitely that's correct.
Q. You're aware, Doctor, that the autopsy also found patchy fibrosis in the heart?
A. Yes.

Q. And you know that that also increases the risk of sudden cardiac death from primary cardiac disease?

A. That's correct.

Q. You commented in response to my brother's questioning that Mr. Jackson had significant coronary arteriosclerosis in one coronary artery?

A. Correct.

Q. And that was a 75 percent stenosis, correct?

A. Correct.

Q. And in your discipline, that is accepted to constitute significant coronary arteriosclerosis?

A. Correct.

Q. Again, raising the risk for sudden cardiac death from primary cardiac disease?

A. That's correct.

Q. Now, you agree with Dr. Gillespie that, in fact, Mr. Jackson has ischemic heart disease?

A. Correct.

Q. And "ischemic" in this context means that the abnormalities in his heart could result in reduced blood flow under certain circumstances to vital organs, including the heart?

A. Yes.

Q. Now, referring back to Mr. -- I'm sorry, Dr. Gillespie's cause of death of ischemic heart

disease complicated by an altercation with the police, you, obviously, accept that there was an altercation with the police?

A. Yes.

Q. And you agree that such an altercation -- well, let me back up a bit.

You agree, in general, that physical exertion can provoke a heart attack in someone with ischemic heart disease?

A. Correct.

Q. And you believe there was sufficient physical exertion in this case to provoke Mr. Jackson's ischemic heart disease?

A. Correct.

Q. Leading him to die from sudden cardiac death due to that heart disease?

A. It's conceivable, yes.

Q. The risk factor of physical exertion for this type of death is present in this case?

A. Right.

Q. Now, your next sentence in your report states, quote: However, the expected rhythm for sudden cardiac death is ventricular fibrillation, not asystole as seen in this case.

Have I read that correctly?

A. Yes.

Q. What you're referring to there, Doctor, is the heart rhythm found when the EMS applied the automatic external defibrillator in the back parking lot at the West Warwick police station?

A. Correct.

Q. That's the first evidence of what Mr. Jackson's heart rhythm was, correct?

A. Correct.

Q. Now, I'd like you for the purpose of my next series of questions to assume something for me, Doctor.

A. Okay.

Q. I'd like you to assume that at that time that the AED had shown ventricular fibrillation. We know that's not true but I'd like you to assume it. Can you do that?

A. Sure.

Q. Doctor, in that case, you would have all of the risk factors for sudden unexpected cardiac death due to primary disease, correct?

A. Correct.

Q. You would have an autopsy that was positive and indeed conclusive for sudden unexpected cardiac death due to primary cardiac disease?

A. Correct.

Q. It would be reasonable for the medical examiner to opine that the cause of death was ischemic heart disease in that situation?

A. Correct.

Q. And to express such an opinion to a reasonable degree of medical certainty?

A. Correct.

Q. Now, I'd like you to assume something different this time. Assume for the purposes of my next series of questions that we have no information whatsoever about what Mr. Jackson's heart rhythm was before he was pronounced dead. Do you understand that?

A. Yes.

Q. In other words, let's assume that the AED did not produce any information whatsoever, either because it wasn't there or it malfunctioned or for whatever reason. Are you following me?

A. Yes. In other words, no AED period.

Q. No AED and no other determination of what the heart rhythm was, okay?

A. Gotcha.

Q. Now, in that instance, we would still have an autopsy that's quite positive for sudden unexpected cardiac death due to primary cardiac disease, correct?

A. Correct.

Q. And in that situation, it would still be reasonable for the medical examiner to give an opinion that the cause of death was ischemic heart disease complicated by an altercation with the police?

A. Yes. That could well be, but then you'd have to go one step further and say that he died with Excited Delirium but not because of it, and you'd have to have some other basis for saying -- choosing one over the other.

Q. Doctor, a moment ago -- I understand.

One of the reasons why you believe that Mr. Jackson had Excited Delirium in this case was that you believe that the heart rhythm he had after he collapsed was asystole?

A. That's one of the reasons, yes.

Q. As opposed to ventricular fibrillation?

A. Correct.

Q. Doctor, is it your opinion to a reasonable degree of medical certainty that Mr. Jackson had Excited Delirium regardless of the fact of what his terminal heart rhythm was determined to be?

A. Yes.

Q. Now, in your report, Doctor, you state: Such a scenario has all the ingredients for sudden unexpected cardiac death. Correct?

A. Correct. Referring to the prior sentence.
Q. Right.
A. Right.
Q. And the prior sentence lists a number of different elements?
A. Exactly.
Q. None of them include a determination that his heart rhythm was ventricular fibrillation?
A. Correct.
Q. The scenario that you say has all the ingredients for sudden unexpected cardiac death is based upon obesity, enlarged heart, coronary arteriosclerosis, a liter of food in the stomach and a violent struggle shortly before he was found without vital signs?
A. Correct.
Q. You do not need to have a confirmed determination of a heart rhythm of V-fib for a medical examiner to conclude that the cause of death was ischemic heart disease?
A. Correct.
Q. In fact, if you have all the ingredients for sudden unexpected cardiac death, a medical examiner is entitled to rely upon those ingredients to reach a conclusion of cause of death due to ischemic heart disease even in the absence of evidence as to what the

final rhythm was, correct?

A. Mostly correct. It would depend upon the circumstances in which the person was found, but basically, for example, if I found he was found lying dead in his driveway, shoveling snow and there was no rescue response, for example, then, yes, you would be correct.

Q. Doctor, in your direct -- well, I'm going to withdraw that.

You understand that at some point after Mr. Jackson was placed in the back of Officer Lukowicz's patrol car, his heart stopped pumping and he became unconscious?

A. Correct.

Q. And it's your opinion that once the heart stops pumping blood, you have only about 13 seconds of consciousness?

A. Correct.

Q. And that's whether the heart stops pumping blood because the heart is in asystole or because the heart is in V-fib?

A. Correct.

Q. Either way?

A. Correct.

Q. Now, you know that Mr. Jackson was conscious when

he was put into the patrol car?
A. Correct.
Q. And that he was making noises and moving for at least the beginning of the ride to the station?
A. Correct.
Q. Both of which are some indicators of consciousness, making noises and moving?
A. Correct.
Q. You also know that he became completely silent, was making no noises and was not moving in that back seat?
A. Correct.
Q. You know that Officer Kelley, when they arrived at the station, looked in the back seat about six seconds after arrival?
A. Correct.
Q. And saw Mr. Jackson and that Mr. Jackson appeared unconscious to Officer Kelley?
A. Correct.
Q. Doctor, do you believe to a reasonable degree of medical certainty that Mr. Jackson was unconscious at some point in the back seat of Officer Lukowicz's patrol car?
A. Yes.
Q. And you believe that he never, thereafter,

regained consciousness?
A. Correct.
Q. Now, the usual way -- let me back up a bit. Doctor, you used the term in response to the direct examination "terminal heart rhythm"?
A. Correct.
Q. By "terminal," you mean the heart rhythm at the point that the subject collapses?
A. Right.
Q. When people die, ultimately, usually their last rhythm is asystole, right?
A. No. I think we're getting into some semantics here. Eventually, the heart is going to be in an asystole, that's true.
Q. But by "terminal," you don't mean that, you don't mean the last act. You mean the point right when the individual collapses?
A. Correct. What this is based on is studies that were done primarily in Miami and in Seattle where fire rescue units that were responding within a matter of just like a few minutes of somebody collapsing, using that particular rhythm when the rescue units were there. In the cases of Excited Delirium, rescue units are frequently already there for various other reasons and you get it within a matter of seconds. Other times

it's a matter of a couple of minutes. But these are the terminal rhythms we're talking about, not one that is taken hours later, for example, and obviously not one occurring immediately as a person loses consciousness because EKG pads are usually not on these people at that time.

Q. Okay, Doctor. But I just want to confirm your use of "terminal" means that the Plaintiff collapsed?

A. Correct. Or the first two minutes or so afterwards. That's what I was trying to convey.

Q. Okay. Doctor, the usual way to determine the heart rhythm that caused the death is to look at the heart rate within the first minute after the person is unconscious, correct?

A. Well, that would be ideal, but in the real world it's usually the first two or three minutes.

Q. Doctor, I wasn't asking whether that would be ideal. I was asking whether that's the usual way. Do you disagree with that, the usual way to determine what heart rhythm caused the death?

A. Yes.

MR. SHEEHAN: May I ask that the screens be turned on, your Honor.

THE COURT: Yes.

Q. Doctor, you testified before?

A. Correct.

Q. And you testified in a case, rather gave a deposition in a case that I think went to trial in fact in the Northern District of California brought by a Plaintiff named Heston against the City of Salinas, correct?

A. Correct.

Q. Referring to page 128 from your deposition, Doctor -- first of all, does this appear to you to be your deposition?

A. Yes.

Q. No reason to dispute that, right?

A. Correct.

Q. On page 128, there's the question on line 6:

I asked earlier -- I'm sorry.

I earlier asked you whether based on the autopsy findings it was possible to determine if Mr. Heston went into ventricular fibrillation, and I think your answer was there was no way to tell. Is that correct?

Answer: Correct.

Have I read that correctly?

A. I can't see it on here. I have pages 126 and 128.

Q. I'm reading on page 128, line 6.

A. Okay.

Q. Line 6 through line 11.

A. Correct. I gotcha. Okay.

Q. I read that correctly?

A. Correct.

Q. And then there's down the bottom a rephrasing.

If someone were to opine in this case that direct electrical stimulation of the heart could not have caused ventricular fibrillation, there would be no way to prove that theory or that opinion, correct, because there's no evidence of ventricular fibrillation?

Have I read that correctly?

A. Yes.

Q. Then there's the answer. And would you read that answer slowly into the record.

A. Sure. (Reading:) Not only that, you not only have no evidence for it but I don't know the time frame from when he was cyanotic and the paramedics actually put the EKG monitor on him. If more than several minutes has gone by, then the asystole means nothing. Usually, we look at the initial heart rhythm to determine within the first minute after the person collapses and then you can be sure of what the electrical rhythm was that terminated their life.

Q. Now, in your deposition, you used the phrase "Usually we look at initial heart rhythm to determine

within the first minute after the person collapses," right?

A. If that's possible, yes.

Q. No, no, Doctor. It's not possible that you used that phrase. You did use that phrase?

A. Yes, I did.

Q. And you were testifying under oath?

A. Correct.

Q. Were you testifying truthfully?

A. Of course.

Q. Was the answer "of course"? I didn't hear it.

A. Yes. Of course.

Q. Now, you are familiar with the work that has been done by Dr. Stratton and his colleagues in this area?

A. Yes.

Q. You rely on that work in your testimony from time to time?

A. I may have. I don't recall. I'm familiar with the work. I know I've quoted it in papers I've written, but I don't know if I've quoted it in the context of testimony. I may have. I just don't recall.

Q. You definitely have quoted it in the papers you've written in the learned literature.

A. Sure.

Q. Dr. Stratton wrote a paper to attempt to determine the terminal rhythm with Excited Delirium Syndrome?

A. Correct.

Q. Again, using "terminal" to mean the initial presenting rhythm after the collapse?

A. Correct.

Q. And if you turn to Tab 25, Doctor, have you found it?

A. Yes.

Q. This is Dr. Stratton's paper on that issue, correct?

A. Correct.

Q. And we have it up on the screen, at least the first page of it, correct?

A. Yes.

Q. And if you turn under "Methods," that's where he describes, rather Dr. Stratton and his colleagues describe the methods they used in their study?

A. Correct.

Q. And he states, and I've highlighted it: Cases of Excited Delirium with respiratory or cardiac arrest were entered onto the scene -- I'm sorry, onto the study if EMS paramedics witnessed the arrest at the scene.

Have I read that correctly?

A. Yes.

Q. What that means is that although he had data from a number of additional cases of individuals who had died from Excited Delirium Syndrome, he did not use that data, at least with respect to determining the terminal rhythm because there was no paramedics who witnessed the arrest at the scene, right?

A. Correct.

Q. And, Doctor, that limitation makes sense to you?

A. Yes.

Q. Doctor, in cases where the terminal rhythm disturbance is known, it's because paramedics checked the rhythm within 30 to 60 seconds of the person becoming cyanotic?

A. That's in the study, yes.

Q. You agree with that statement, whether it's in the study or not, Doctor?

A. In this case, yes.

Q. No, no. Doctor, I'm stating that as a matter of general fact that where the cases where the presenting rhythm disturbance or what you call the terminal rhythm is known it's because paramedics check the rhythm within 30 to 60 seconds of a person becoming cyanotic?

A. In general, no, I would not say that's true at all.

Q. Okay.

A. Because it takes them longer to get to the victim.

Q. I didn't hear the back of your response.

A. It takes them longer to get to the victim. In a study such as this, they could narrow it down to within 30 to 60 seconds. In the real world, when somebody collapses at home and the wife calls 911, paramedics usually cannot get there within 30 to 60 seconds. It's going to be usually a minute or two longer than that.

Q. Doctor, in many, many cases of sudden cardiac arrest, the presenting rhythm disturbance is never determined?

A. That's true.

Q. Because an attempt was made to determine the rhythm too late after the arrest or no attempt was made at all?

A. Correct.

Q. Doctor, turning to page 129 from your sworn testimony in the Heston case, the next question and answer after what we've read, I'd like to read the question and I'd like you to read the answer.

Question: In this case, there's no evidence of that, correct?

And by "that," you understand it means what the initial presenting rhythm was, right, Doctor?

A. I don't recall the Heston case that well, but --
Q. I mean, from the context you can see that the questioner's use of the word "that" is referring to what was the initial heart rhythm after the collapse.
A. Okay.
Q. Would you agree with that, Doctor? I don't want to put words in your mouth.
A. I believe that's correct, yes.
Q. Would you read the answer.
A. (Reading:) Exactly. I'm not sure of the time frame that's going on at that particular time, but usually in these cases the paramedics are already on the scene. They are not called to the scene after the person turns cyanotic. They're already on the scene and within 30 to 60 seconds you know what the rhythm is. In that case, I don't think you have that in this case, therefore, it's impossible to be definitive about it. As I said before, in cases of Excited Delirium almost invariably you see their -- it says PDA. It should be PEA, or asystole -- PEA meaning pulses electrical activity. But, again, in this particular case, we don't know for sure.
Q. Doctor, in your answer, you did not refer to or rather limit your answer to scientific studies that have been published in the literature, did you?

A. No.

Q. When was Mr. Jackson noted to be cyanotic?

A. I believe when he was taken out of the police car.

Q. His lips were blue, right?

A. Right.

Q. That's indicative of a central cyanosis, right, Doctor?

A. I don't know what you mean by central cyanosis. It is cyanosis in the fact that his lips are blue.

Q. You don't know what the term "central cyanosis" means, Doctor?

A. Never heard that before.

Q. Okay. Do you understand that there's peripheral cyanosis and a central cyanosis and they can be caused by different things?

A. No, I do not.

Q. Now, you know from your review of the record that from the moment that Mr. Jackson was observed in the back lot, it was noted that his lips were bluish?

A. Correct.

Q. He was already cyanotic?

A. Correct.

MR. SHEEHAN: Your Honor, with the Court's permission, I'd like to play the video from the back lot, which is Exhibit 26, I believe.

THE COURT: Okay.

MR. CLIFFORD: No objection, your Honor.

THE COURT: Very good. Let's do that.

MR. SHEEHAN: And as a preface, what we have, your Honor, and it's on the screen already, it's going to have a counter that's going to come on -- and Doctor, I'd appreciate your attention also -- at the point that the squad cars stopped. And I can represent to the Court, I believe, without objection that those are the squad cars that contained Mr. Jackson. We're going to see that as they pull him out. But a counter is going to appear in the top left corner, and I want to use that counter to determine time intervals.

THE COURT: So are you going to be stopping the video in order to direct attention to that counter, or are you just going to let it play all the way through?

MR. SHEEHAN: I'm going to let it run from the point that the counter starts, which is when the squad cars arrive, up to the point that the AED is attempted, and I'd like to determine that interval.

THE COURT: So this video begins when the squad cars arrive?

MR. SHEEHAN: Correct.

THE COURT: Okay.

MR. SHEEHAN: And I am going to ask it be

stopped once in the middle, and that is at the point that he's taken out of the car. So there's going to be point of arrival, which is zero seconds, then there's going to be when he's taken out of the squad car, and the time will be on the screen, and then there's the time the AED is applied. Proceed?

THE COURT: Yes.

(Video played.)

Q. Two minutes, can we agree, he's taken out of the car?

A. Yes.

(Video played.)

Q. Doctor, can we agree that at five minutes and 30 seconds the AED is applied?

A. Yes.

Q. And that's the point that there was a determination made concerning what Mr. Jackson's heart rhythm was for the first time?

A. Correct.

Q. In your report, you state that the expected heart rhythm for sudden unexpected cardiac death due to ischemic heart disease is ventricular fibrillation?

A. Correct.

Q. In V-fib, the heart has electrical charges fluttering through it, correct?

A. Correct.
Q. But it is not pumping?
A. Correct.
Q. And AED is designed to deliver an electrical shock to stop the heart and then the heart will be restarted?
A. Correct.
Q. And obviously, if you're already in asystole, that means there are no electrical charges in the heart, there's nothing to stop?
A. Correct.
Q. So the AED doesn't work with asystole?
A. Correct.
Q. It's designed to work with V-fib?
A. Correct.
Q. The purpose of the shock is to defibrillate by stopping the heart and with CPR restarting it in a normal sinus rhythm, correct?
A. Correct.
Q. That's usually what happens with V-fib?
A. Hopefully, that's what happens, yes.
Q. That's usually what happens with V-fib?
A. I don't know if it's usually what happens. That's what you hope happens.
Q. Doctor, referring to your testimony in Heston again, page 130, the part I've highlighted states,

quote: But skipping all that, ventricular fibrillation is better because you can defibrillate them and cause the heart to come to a standstill and then start it again. That's usually what happens.

That's your testimony, isn't it, Doctor? Have I read that correctly? Have I read that correctly?

A. You read it correctly but that's misleading.

Q. Thank you.

THE COURT: Mr. Sheehan, you need to put that in context with the question.

MR. SHEEHAN: Sure.

Q. Doctor, you were asked --

THE COURT: Would you just read the question in and then if you want to abbreviate the answer or you can put the -- you should probably put the whole answer in. I think that would be best.

Q. Doctor, I'm going to read the question. Would you read the answer, please.

Question: It is more difficult to gain a sinus rhythm from someone who is in asystole versus ventricular fibrillation?

A. (Reading:) Generally speaking, it's easier from ventricular fibrillation if it's a healthy individual to begin with. The asystole, when people die with asystole -- again it should be PEA not PDA -- it's my

understanding that their chances of survival are very, very slim unless it's in an operating room, for example. Skipping all that, ventricular fibrillation is better because you -- and then I ran out of space.

THE COURT: You need to move it up.

A. (Reading:) Skipping all that, ventricular fibrillation is better because you can defibrillate them and cause the heart to come to a standstill and then start it again. That's usually what happens. In fact, CPR was begun, the whole concept came about because of young men who were getting electrocuted and dying and the idea was to defibrillate them and start their hearts again.

Q. Just confirming, that's the end of the answer, right, Doctor?

A. Correct.

Q. Now, in an individual who is experiencing a cardiac arrest due to primary cardiac disease whose initial presenting rhythm is V-fib, there's no circulation being provided to the brain?

A. Correct.

Q. What usually happens if there's no intervention for such an individual is that the heart will stop beating entirely?

A. Correct. Well, the heart will come to a

standstill entirely, electrical standstill entirely.
Q. It will come to an electrical standstill entirely?
A. Correct.
Q. In other words, it will go from V-fib to asystole?
A. Correct.
Q. In other words, the condition of the patient will deteriorate through V-fib into asystole?
A. Correct.
Q. For that reason, if more than several minutes have gone by from the heart stopping pumping until the paramedics place the EKG on a patient, the fact that the EKG then shows asystole means nothing?
A. Correct.
Q. Now, in this case, we know that more than five minutes and 30 seconds passed?
A. Correct.
Q. Because you've already testified in your opinion he was unconscious in the squad car?
A. Correct.
Q. And by the way, Doctor, the unconsciousness comes after the cardiac arrest?
A. Right.
THE WITNESS: Excuse me. Can we take a break for five minutes?
THE COURT: Yes, we can. We'll take a short

break, reconvene in about five, ten minutes.

(Recess.)

Q. Just before we took the break, you were testifying that the temporal sequence of cardiac arrest is that the heart stops, then within say 13 seconds or so, the individual becomes unconscious and very quickly thereafter becomes cyanotic?

A. Correct.

Q. Now, in your opinion, Mr. Jackson was already unconscious in Officer Lukowicz's patrol car?

A. Correct.

Q. And you relate that opinion to Officer Lukowicz's account that he became completely silent and there was no noise?

A. Correct.

Q. And Officer Lukowicz testified that happened at some point along the midpoint of the ride back to the station, do you recall that?

A. Yes.

Q. And he said that it takes at most a minute or two to get from the location at the parking lot for Joyal's Liquors to the station, do you recall that?

A. Yes.

Q. So it's reasonable under those facts to assume that Mr. Jackson was unconscious for somewhere in the

area of 30 seconds to a minute before they arrived at the station?

A. Correct.

Q. And that preceded by that is at least 13 seconds of heart stop but still conscious?

A. Right.

Q. So we can push the point of cardiac arrest back to about 45 seconds prior to arrival at the station, if not longer?

A. It's conceivable, yes.

Q. Well, that's reasonable under these facts?

A. Right.

Q. That's the best scenario under these facts, right?

A. Right.

Q. And with that scenario, it would be six minutes and 15 seconds from the cardiac arrest to the point in time the AED was applied?

A. Correct.

Q. At a minimum?

A. Correct.

Q. That's more than several minutes, Doctor?

A. Pardon?

Q. That's more than several minutes?

A. Well, I'd say several minutes. I'm not sure how you define "several." To me, it's more than three or

four.

Q. That's certainly more than three or four, Doctor?

A. Right.

Q. And Doctor, you've testified that if an individual goes without breathing for two to four minutes, you would expect to have some degree of permanent injury?

A. Correct.

Q. And if an individual goes without breathing for more than four minutes, you expect in most cases he's going to die?

A. Correct.

Q. And that's whether he starts in V-fib or asystole?

A. Right.

Q. It's simply oxygen deprivation resulting in hypoxia, anoxia and death?

A. Correct.

Q. Doctor, you would agree that the finding of asystole when the AED was applied in this case does not rule out that Mr. Jackson was in V-fib as the initial presenting rhythm, correct, because of the time period that went by?

A. You can't completely exclude it, no. The problem you have is that you don't know how long a person can remain in V-fib before they actually go into asystole. The time frame is more characteristic of real life

scenarios that I see in sudden cardiac death where you don't have somebody within 30 seconds or a minute applying the AED. It usually is several minutes from the time that rescue gets the call, by the time they get there and they find the person in V-fib. Having said that, we don't know how long it takes once a person is in ventricular fibrillation to actually then eventually go into asystole.

Q. Doctor, hasn't the American Heart Association published how long it takes to go from V-fib to asystole?

A. I have no idea.

Q. That's not within your area of expertise, Doctor, correct?

A. No, it's not.

Q. And you don't know whether that's four minutes or not?

A. I have no idea. I'm not sure how you would figure it out, either.

Q. Now, Doctor, the chances of resuscitation are much better if the individual is found in V-fib than in asystole?

A. Correct. Sorry. But to qualify, like I said in my deposition, it has been, provided a person has a normal cardiovascular status.

Q. Individuals pay a heavy price for deteriorating through V-fib into asystole?

A. Correct.

Q. In that they cannot be brought back by AED?

A. Correct.

Q. Now, Doctor, you testified in the direct that with Excited Delirium Syndrome, there's no anatomic cause of death noted on autopsy?

A. Correct.

Q. In other words, there are no abnormal findings on autopsy attributable to Excited Delirium?

A. Correct.

Q. In this particular case, obviously, for Mr. Jackson's autopsy, you would agree that there were no abnormal findings indicative of Excited Delirium Syndrome, right?

A. There are none.

Q. There are none, in general or in this case?

A. Always.

Q. Right. Now, you're familiar with Vincent DiMaio's book on Excited Delirium?

A. Right.

Q. Dr. DiMaio, I should say. And you believe it's a very good account of the history and mechanism of Excited Delirium?

A. Pretty much, yes. There are a few things in the book I disagree with but, in general, yes, it's a good book.

Q. You certainly respect Dr. DiMaio on the issue of Excited Delirium?

A. Of course.

Q. And you're aware it's Dr. DiMaio's opinion that the diagnosis of Excited Delirium as a cause of death is a diagnosis of exclusion?

A. I don't recall, but I disagree with that one hundred percent.

Q. Fine. But before we get to whether you disagree with it or not, my question was are you aware that it is his opinion that a diagnosis of ED as a cause of death is a diagnosis of exclusion?

A. I know he said that, yes.

Q. In fact, you agree with that opinion in the sense that a pathologist confronted with a possible case of Excited Delirium must exclude sudden death from natural disease process and exclude sudden death from trauma?

A. Correct.

Q. You agree that one of the criteria for a pathologist to give Excited Delirium Syndrome as a cause of death is that the pathologist must have a negative autopsy?

A. No. You must exclude trauma and you must exclude natural disease processes as a cause of death. In that sense, you have a negative autopsy but you can have a natural disease process and die with Excited Delirium with the disease process but not because of a disease process.

Q. Doctor, let's be clear. "Negative" means that the autopsy reveals no disease process or injury that independently could account for the death of the individual?

A. Correct.

Q. Okay. Now, here we had a positive autopsy suggestive of sudden unexpected cardiac disease from primary cardiac disease?

A. Correct.

Q. I'm sorry. Sudden unexpected cardiac death. If I may correct myself.

A. Correct.

Q. In other cases of suspected Excited Delirium that you're aware of, postmortem brain samples have been taken from the autopsy and analyzed at Dr. Mash's lab in Florida?

A. Correct.

Q. And the results of that analysis provides supportive objective evidence to validate or rule out a

finding of Excited Delirium?
A. Right.
Q. It is not required for a pathologist such as Dr. Gillespie to take postmortem brain samples and send them to Dr. Mash if the autopsy showed positive evidence suggestive of sudden unexpected death due to heart disease?
A. I would disagree with that.
Q. So you fault Dr. Gillespie in this case for not taking brain tissue from Mr. Jackson?
A. Not exactly.
Q. I asked you was it required, and you said you would disagree with that.
A. No. I was disagreeing with other statements you've made. Was it required? No, it's never required, no. But not considering Excited Delirium in the differential I think is a mistake.
Q. Doctor, my question is quite simple. You do not believe that it was required for Dr. Gillespie in this case to take postmortem brain samples and send them to Dr. Mash?
A. No. It's not required, no.
Q. And absent analysis of such brain samples, the diagnosis of EDS is based solely on the pathologist's evaluation of reported observations of behavior?

A. Of course.
Q. That's why you say Excited Delirium Syndrome is diagnosed on behavior?
A. Correct.
Q. The pathologist isn't there, obviously?
A. Correct.
Q. Has to rely on observations of witnesses?
A. Correct.
Q. If witnesses are police, they have a bias, which is to exaggerate how violent the suspect was to justify their response?

MR. CLIFFORD: Your Honor, I object.

THE COURT: Grounds?

MR. CLIFFORD: I'm not sure the Doctor is expert to testify on the biases of police.

THE COURT: Well, he just asked him if there's a bias so I'm going to allow it. It's legitimate cross-examination. Go ahead.

A. Could you repeat the question, please.
Q. Sure. If the witness that's providing the information about the behavior of the suspect is the police, they have a potential bias, which is they want to vindicate their own behavior in the event?

THE COURT: Well, I'm not going to allow that. That wasn't your question.

MR. SHEEHAN: I didn't mean to change it, your Honor. I frankly didn't.

THE COURT: At least I didn't understand that to be what you were asking. I thought you were asking that if a witness has a bias, then that is reflected in the information that is conveyed, but he cannot testify as to whether police officers have a bias or not.

So if that's what you objected to, I sustain your objection.

MR. CLIFFORD: Thank you, your Honor.

Q. Just for the record, you've testified in probably a thousand cases where your testimony depended in part on the testimony of police, right?

A. Absolutely. Sure.

Q. And you're quite familiar with the factors that go into evaluating testimony of police in a courtroom?

A. No. Not in a courtroom. I evaluate what any witness, including police will tell me based on the autopsy findings and everything else I know about the case. Sometimes police, like anybody else, are truthful; sometimes they exaggerate; sometimes they underestimate. You have to evaluate -- there's no difference with lay witnesses or police as far as I'm concerned.

Q. Now, different pathologists may take the same

behavioral history and reach different conclusions as to whether or not that history justifies a diagnosis of Excited Delirium?

A. That's true.

Q. There has been no research whatsoever done to validate a pathologist's diagnosis of Excited Delirium either as to the accuracy of the diagnosis, the sensitivity of the diagnosis or the specificity of the diagnosis, correct?

A. I don't know that.

Q. Certainly, you're not aware of any?

A. Correct. I don't know if anybody's done any study, surveys of pathologists and their diagnosis of Excited Delirium, which I think is what you're getting at. I don't know of any study like that.

Q. As far as you know, it's never been determined the extent to which different medical examiners would diagnose Excited Delirium on the same set of facts?

A. Right.

Q. As far as you know, the mechanism of death for Excited Delirium has not been scientifically studied?

A. Correct.

MR. CLIFFORD: Your Honor, I object on the grounds that I think this hearing was designed not to try the credibility of Excited Delirium but to address

the analysis of Dr. Wetli.

THE COURT: Well, Mr. Sheehan, I think that's correct, but do you want to respond to that?

MR. SHEEHAN: I'm moving on, your Honor. I don't need to belabor that issue.

THE COURT: Okay. Go ahead.

Q. Doctor, there are two fundamental diagnostic criteria for Excited Delirium that subjects must have. They must have agitation and delirium, correct?

A. Correct.

Q. When determining Excited Delirium as a cause of death, the pathologist is expected to determine what caused the Excited Delirium?

A. Correct.

Q. Because Excited Delirium is caused by something?

A. Correct.

Q. With cocaine, it's caused by the intoxicating effects of the cocaine?

A. Essentially, yes.

Q. It's your opinion that Mark Jackson died from Excited Delirium caused by untreated schizophrenia?

A. Right.

Q. By untreated, you refer to the fact that although he was prescribed medication many years ago, there's no evidence that he took it?

A. Right. And the toxicology was negative.
Q. Negative for medication?
A. Correct.
Q. So it's your opinion that his delirium was caused by schizophrenia, not medication or withdrawal from medication?
A. Correct.
Q. Doctor, delirium is a psychiatric disorder, correct?
A. Correct.
Q. It's specified and spelled out in the DSM, correct?
A. Correct.
Q. The DSM is a diagnostic tool in psychiatry?
A. Correct.
Q. Excited Delirium is a psychiatric diagnosis?
A. Correct.
Q. You are aware that according to the DSM, the primary or rather predominant disturbance of delirium is a clinically significant deficit in organization that represents a significant change from a previous level of functioning?
A. Correct.
Q. You are aware that the DSM defines delirium as having a disturbance of consciousness manifested by a

reduced awareness of environment, a change in cognition and takes place over a short period of time, usually hours to days?

A. Correct.

Q. You also know that according to the DSM the diagnosis of delirium can only be used if the cause of the delirium is either a general medical condition, a drug or a toxin?

A. Okay.

Q. Correct?

A. Yes. Whatever you mean by general medical condition. I would presume it would also mean schizophrenia.

Q. Doctor, general medical conditions are not mental disorders, are they?

A. As far as I'm concerned, they are.

Q. In the DSM by definition, general medical conditions are not mental disorders?

A. You're ignoring the cases where they have schizophrenia.

Q. So let's just first clarify. You agree that in the DSM general medical conditions are not mental disorders, but you're rejecting the DSM in this context with respect to schizophrenia?

A. One thing I consider general medical disorder as

including schizophrenia. You're telling me that it's in the DSM that in psychiatry it is not, so I'll take your word for that. But then if that's the case, then you cannot have delirium with schizophrenia and that doesn't make any sense whatsoever. We see it.

Q. Now, Doctor, in fact, in this case you believe that Mr. Jackson's Excited Delirium was caused by schizophrenia?

A. Correct.

Q. You're not an expert on schizophrenia?

A. No, of course not.

Q. Doctor, in your report, you list the various things that you read at the time you wrote your report, or rather reviewed, correct?

A. Correct.

Q. You don't review there the video that we just showed, correct?

A. No, I did not see the video. I had seen -- I have photographs -- wait a minute.

Q. So at the time you wrote your report, you had not seen the video, right, Doctor?

A. I don't recall it, no. No, I didn't --

Q. Now, Doctor --

A. I'm sorry. I'm trying to answer your question.

Q. I beg your pardon.

A. I had two CDs of photographs, but I did not have a DVD of the scene that you just showed me.

Q. Okay. At the time you wrote your report?

A. Correct.

Q. And subsequently, Doctor, when did you first see the video?

A. Just now.

Q. So up to today in this courtroom, you had not seen that video?

A. Correct.

Q. Up to today in this courtroom, you did not know the time interval shown on the video between when Mr. Jackson arrived at the back lot and when the AED was applied?

A. Correct.

Q. Have you read Dr. Pinals' report in this case, Debra Pinals, a psychiatrist?

A. Yes.

Q. Do you dispute that she's an expert on schizophrenia?

A. No.

Q. Doctor, do you know if there are different types of schizophrenia?

A. Yes, there are.

Q. What are the types?

A. I have no idea. I just know undifferentiated paranoid. There are several other types. I don't know what they are. I don't classify them. I'm not a psychiatrist.

Q. Do you know what type Mr. Jackson was?

A. No.

Q. Do you know what types of schizophrenia are associated with Excited Delirium?

A. No.

Q. Now, are you aware that schizophrenia can exist in a chronic, relatively steady state in an individual?

A. Sure.

Q. Or it can exist in an acutely psychotic state?

A. Exactly.

Q. And you understand that Excited Delirium is associated with schizophrenia in the acutely psychotic state, right?

A. I don't know that. I do know that I've seen cases of Excited Delirium with schizophrenia where they are smoldering along untreated or undiagnosed for a period of time and then they have that psychotic break which we associate with -- you know, they have manifestations of Excited Delirium. They don't necessary have any agitated psychotic state or acute psychotic state before getting into Excited Delirium, I have not made

that association, no.

Q. Doctor, let me ask you this. Is it your opinion that the cases of schizophrenia associated with Excited Delirium are not limited to cases that involved an acutely psychotic state?

A. No. As I said, the cases that I recall seeing are generally individuals who have a history of schizophrenia which is untreated or undiagnosed, and then the manifestation of Excited Delirium becomes apparent but not necessarily in an acute psychotic state prior to the development of Excited Delirium. I've seen that happen, but that's not always the case.

Q. In those examples, the Excited Delirium and the acute psychotic state are contemporaneous, concurrent?

A. Yes. They frequently are, yes.

Q. So it's been your experience that, in fact, Excited Delirium is associated in schizophrenia with individuals that were either in an acute psychotic state before the Excited Delirium or entered into a psychotic state in connection with the Excited Delirium, right?

A. Yes. That's true.

Q. Now, another term for Excited Delirium used in the literature is acute exhaustive mania, correct?

A. Yes.

Q. And you know of no history involving Mr. Jackson of mania, correct?

A. Correct.

Q. You agree that the pathologists should consider the medical and psychosocial history of the decedent as part of the forensic pathology investigation?

A. Of course.

Q. And in Mr. Jackson's case, you know that he had no prior history of either mania, violence, paranoia or prior episodes of Excited Delirium?

A. Correct.

Q. Doctor, you agree that in Excited Delirium the Excited Delirium precedes and is not precipitated by the encounter with the police?

A. That's not always true.

Q. Doctor, you testified at trial in Tennessee in the case of **Bud Lee versus Metropolitan Government of Nashville**, correct?

A. Correct.

Q. And Doctor, I'm putting on the screen the transcript at page 2350 where you are sworn. Do you see that?

A. Yes.

Q. And then if we continue to page 2401, the answer at line -- I'm sorry, the question at line 21 is:

Okay --

A. I can't see it on the screen.

Q. I beg your pardon, Doctor, and I appreciate your pointing that out to me. I've got to figure that out a little bit better.

The question is: Okay. So you had no evidence that he had Excited Delirium at the time he was sprayed?

And then if you would just read your answer, it goes on to the next page.

A. (Reading:) Well, except when you look back at the whole episode and so forth, you'd know that he had Excited Delirium at that time. He wasn't having any outward manifestations of it. The encounter with the police does not precipitate Excited Delirium. Excited Delirium is precipitated by the drug.

Q. So the statement in your testimony is that the encounter with the police does not precipitate the Excited Delirium, correct?

A. In this case, that's true. Only in this case. I was referring specifically to this case, the Lee case, not as a general statement for all the cases of Excited Delirium.

Q. Doctor, as a matter of the general statement, the biochemical process that creates Excited Delirium

begins before the interaction with the police, correct?
A. In this particular case --
Q. No, no. Doctor, as a general case, as a point of science, the biochemical process that causes Excited Delirium begins before the interaction with the police?
A. In general, that's true, but there are exceptions. I've seen them.
Q. Doctor, in your testimony in the Lee case, you don't refer to any exceptions?
A. I was referring only to the Lee case.
Q. And in your answer, Doctor, if you were just referring to the Lee case, you could have said in this case, the encounter with the police does not precipitate the Excited Delirium, correct?
A. I could have said that, but we were talking about the Lee case during the trial, that's what I was referring to. I wasn't giving a lecture on Excited Delirium.
Q. Doctor, one of the most accepted explanations for the biochemical process that causes Excited Delirium involves catacholamines, correct?
A. Yes. Catacholamines, dopamine and a whole variety of hormones in the brain.
Q. Doctor, referring now to the Heston case, page 126, line 19:

Question: And you attribute the surge of catacholamines to his struggle with the police, correct?

What was your answer?

A. (Reading:) Well, it began before the struggles with the police. It began with whatever demons he was recognizing that was causing him to have Excited Delirium to begin with. I'm sure the struggle with the police may or may not have added to it. He may have already been at the maximum level of catacholamines by the time the police interacted with him. There is no way of knowing.

Q. Doctor, it's your experience that people with Excited Delirium are intensely paranoid and violent even without encounters by police?

A. Very frequently, that's true.

Q. They smash glass, inflict lethal-size wounds to their upper extremities, jump into pools of water and drown, jump from one building to another, jump down stairs and rupture spleens. Those are all kinds of things that can happen to these people even without encounters by the police?

A. Correct.

Q. In fact, it's your opinion that police involvement prevents a person with Excited Delirium from

experiencing those adverse events?

A. Exactly.

Q. Now, Doctor, in all of your published articles, the suspect, or rather the decedent from Excited Delirium was already demonstrating behavior showing that he was in a state of Excited Delirium when the police arrived?

A. In my published articles, that's probably true.

Q. Doctor, if there's any doubt in your mind, I'll go through them with you.

A. No. No. I'm saying in my published articles that's probably true. I don't know -- I could have mentioned a case where that didn't happen, but I don't recall that.

As far as the usual scenario is that the police are called because of the abnormal behavior of an individual.

Q. Doctor, let's just turn to Tab 7, and we'll look at one of your published articles.

And I'm going to turn to page 30, Doctor. Page number 30.

A. Okay.

Q. And I've highlighted a sentence -- actually, two sentences. Do you see that?

A. Yes.

Q. Could you read those two sentences into the record.

A. (Reading:) Descriptions of the events that preceded death indicate that all victims showed clear evidence of Excited Delirium before encountering a law enforcement officer. Therefore, events that occurred in police custody are not involved at the onset of Excited Delirium.

Q. Thank you, Doctor. Now, in that article, you viewed the fact that all victims showed clear evidence of Excited Delirium before encountering a law enforcement officer as some logical evidence for the conclusion that the events that occurred in police custody were not involved in the onset of ED?

A. Right.

Q. You make no reference to any cases in which the events that occurred in police custody were involved in the onset of ED, do you?

A. Correct. 1995, that was true.

Q. Doctor, was it also true in 2009?

A. No. Because since then, I've seen cases in which a person -- everything was precipitated upon an encounter with the police. I've seen cases like that happen since --

Q. Doctor, so it was not true in 2009, is that what

you're saying?

A. I'm not sure what the question was. I think the question was, basically, have I seen cases in which the person was not exhibiting signs and symptoms of Excited Delirium prior to the police encounter. The answer to that is, yes, I have seen that.

Q. That wasn't the question, Doctor.

A. Okay. I'm sorry. I misunderstood the question.

Q. You said that in 1985, when the article was published, the data demonstrated that the onset of Excited Delirium occurred prior to the police encounter.

A. In those cases we studied, yes.

Q. And then I said to you was that also true in 2009.

A. My answer would be no. We've seen cases other than that.

Q. Now, in 2009, you, again, published in the learned literature, did you not?

A. I don't recall.

Q. If you'd turn to Tab 3. You are an author of that article, are you not, Doctor?

A. Correct.

Q. Page E-15 -- by the way, Doctor, this article reports on 90 cases, right?

A. Correct.

Q. If you turn to page E-15, there's a paragraph that begins "Arrest circumstances." Do you see that?

A. Yes.

Q. Would you read that paragraph into the record.

A. Sure. (Reading:) Arrest circumstances and police force measures are shown in Table 2. Disturbance call encounters evidenced agitated behaviors including destruction of property, disorderly conduct, inappropriate disrobing, running wildly in and out of traffic on streets and kicking residents' doors, or the compulsion to break or bang on glass. Aggravated assaults on friends or family members and attempted breaking and entering are also reported. One subject in detention experienced hallucinations and flooded his cell after confinement. Attempts by correctional personnel to restrain a prisoner resulted in him violently resisting their attempts to control him followed by sudden death.

Q. Thank you. Now, disturbance call encounters, you understand, is a shorthand for a call made to the police reporting a disturbance?

A. Correct.

Q. If we look at the Table 2, the circumstances that led to the police encounter are broken out for all 90 cases, correct?

A. Correct.
Q. And in every one of those circumstances, the individual was already demonstrating agitation at the point that the police intervened?
A. No. That's not what it says at all.
Q. Okay. Disturbance call.
A. Could be destroying property. Could be destroying signs.
Q. Okay. And Doctor, destroying signs and destroying property, you understand can be a sign or symptom of Excited Delirium?
A. Or not.
Q. I'm sorry. Could you answer my question?
A. Can be a sign? Sure, it can be.
Q. Okay. And the statement is made that the disturbance call encounters evidenced agitated behaviors?
A. Correct.
Q. Including destruction of property?
A. Correct.
Q. So the article is referencing destruction of property as an agitated behavior?
A. Okay.
Q. Correct?
A. Correct.

Q. All of the examples of the disturbance calls are given as agitated behaviors in your article in the medical literature.

A. It's actually Dr. Mash's article. I was a co-author, yes.

Q. Doctor, do you stand by this article?

A. Of course.

Q. So is the answer yes, that all of the incidents that involved a disturbance call involved agitated behaviors?

A. Of the cases reported in this article, yes.

Q. And then we have aggravated assaults, and the list goes on, Doctor, all of these under incident circumstances are agitated behaviors that occurred prior to the police encounter?

A. Correct.

Q. For 2009?

A. Correct.

Q. And in 2009, you still had not seen fit to publish in the literature any examples of Excited Delirium where the agitation was precipitated by the police encounter?

A. Never occurred to me to do that, no.

Q. Whether it occurred to you or not, the fact is that you didn't?

A. Correct.

Q. Now, you acknowledge that to have delirium for purposes of Excited Delirium, the suspect must experience a significant change from a previous level of functioning?

A. Correct.

Q. Therefore, normal behavior for an individual does not constitute delirium?

A. Correct.

Q. Normal behavior of a chronic schizophrenic does not constitute Excited Delirium?

A. Correct.

Q. You understand that chronic schizophrenics normally or rather frequently and within the range of normal for their disease react differently when they interact with the police than people who are not schizophrenic?

A. I would imagine that's true, but I'm not a psychiatrist. I don't have any firsthand knowledge of that.

Q. So you don't know whether it's normal for a chronic schizophrenic to have difficulty following police commands?

A. You would have to ask a police officer that or a psychiatrist that. I don't know.

Q. Nor do you know whether it's normal for a chronic schizophrenic to have diminished speech?

A. They can, obviously, but I don't know that's true of all schizophrenics.

Q. Do you know whether one of the features of chronic schizophrenia is marked poverty of speech?

A. No, I don't know that. I thought it was chronic. I know that's one of the criteria that's used in diagnosis. I don't know that's always constant with a person who has a diagnosis of schizophrenia. Again, I'm not a psychiatrist.

Q. I didn't ask whether it's always present. I said one of the criteria or rather one of the signs or symptoms associated with chronic schizophrenia is marked poverty of speech.

A. Schizophrenia, acute or chronic, I don't know. I know that's one of the symptoms of it, yes, or one of the signs of it.

Q. Do you know whether saying something immature to the police like "You're not the boss of me" is typical for a chronic schizophrenic?

A. I have no idea.

Q. Do you whether saying "I love you guys" is typical for a chronic schizophrenic?

A. I have no idea. I'm not a psychiatrist.

Q. Do you know whether a schizophrenic walking away from the police in a tense situation is typical or normal for chronic schizophrenia?

A. No idea.

Q. Is panicking and resisting the police when they act aggressively typical for a chronic schizophrenic?

A. Again, I'm not a psychiatrist. I don't know.

Q. You don't know whether the behaviors that Mr. Jackson demonstrated were typical for a chronic schizophrenic, correct?

A. At the time of the encounters that I read and so forth, they would not be typical for a schizophrenic, but it's typical for Excited Delirium.

Q. No, no. Doctor, if you could just focus on my question.

You do not know whether Mr. Jackson's walking away from the police was typical for a chronic schizophrenic?

A. That's correct.

Q. Nor whether his statements "You're not the boss of me" or "I love you guys" was typical for a chronic schizophrenic, correct?

A. Again, I'm not a psychiatrist. I don't know.

Q. Okay. Nor do you know whether his panicking and resisting the police was typical for a chronic

schizophrenic?
A. No idea.
Q. Now, one thing that causes someone to show enormous strength is if they are fighting for their lives?
A. Possible, yes.
Q. Or for the life of someone dear to them?
A. Correct.
Q. We all know the stories of mothers picking up automobiles?
A. Right.
Q. In this case, two officers, Lukowicz and Kelley, were able to restrain Mr. Jackson and put the cuffs on him, correct?
A. It's my understanding it took five officers to restrain him and put the cuffs on him.
Q. And that's part of your opinion in this case?
A. That's part of what I read, yes.
Q. And that's part of your opinion that he exhibited extraordinary strength? That's one of the reasons?
A. Right. Right.
Q. Okay. But the fact is, Doctor, and I suggest to you that it's clear in the records, that by the time the next three officers arrived, he was already down on the ground and had the cuffs on him. You didn't

realize that, did you?
A. No, I did not.
Q. Now, you don't know whether Mr. Jackson's act of swatting at Officer Kelley was typical for a chronic schizophrenic?
A. True.
Q. You don't know whether Mr. Jackson's failure to give in when he was pepper sprayed or hit in his legs with a baton was consistent for a chronic schizophrenic fighting in fear for his life?
A. That I would find very hard to believe. In my opinion, that is not typical. We're talking about physiologic responses here and unless -- and this is typical again for people who are totally impervious to pain, this is typical for Excited Delirium. I have not encountered that with any schizophrenics that had sudden death or anything else with that. It's not anything I've ever encountered.
Q. So it's your experience that pepper spray disables a suspect in all cases even if the suspect is fighting for his life and for him it's a matter of life and death?
A. As far as I know, that's what happens.
Q. In all cases?
A. I don't know about all cases. It certainly

doesn't happen in Excited Delirium.

Q. Okay. But what I'm saying is in an individual who generally believes he's in a fight for life and death, you don't know whether in all such cases pepper spray will disable him, correct?

A. That's true.

Q. Nor do you know whether baton strikes to the leg will disable him?

A. Correct.

Q. Doctor, it's your opinion that at the time that the police first pulled into the back lot of Joyal's Liquors and shone their light on Mr. Jackson, he already, in some sense, was experiencing Excited Delirium?

A. I can't say that in the case of Mr. Jackson, no.

Q. Okay. So it's not your opinion in this case that he was already in Excited Delirium at that point?

A. I don't know if he was or not.

Q. Okay. So the only evidence you have for behavior indicating Excited Delirium is his behavior in the interaction with the police?

A. Correct.

MR. SHEEHAN: Nothing further.

THE COURT: All right. Thank you. Do you think you'll have a redirect?

MR. CLIFFORD: Your Honor, I just have a couple of questions, just to clear things up, yes.

THE COURT: How many do you think?

MR. CLIFFORD: It shouldn't take very long. No longer than five to ten minutes, your Honor.

THE COURT: My problem is -- let's go off the record.

(Discussion off the record.)

REDIRECT EXAMINATION BY MR. CLIFFORD

Q. Doctor, I just want to review just a couple of things. What did you rely on in making your determination that Excited Delirium was present in this case?

A. Basically, the behavior, inappropriate actions with the police, the unintelligible sounds, inappropriate remarks, being impervious to pain compliance techniques and the subject having to be restrained. Those are the main criteria.

Q. And when it comes to the issue of the ventricular fibrillation versus the asystole, as we know it and the data that you reviewed indicated that he was in asystole at the time the medics arrived?

A. Correct.

Q. Correct me if I'm wrong, would it be fair to say that any evidence of ventricular fibrillation would be

speculative?

A. Correct.

MR. CLIFFORD: I have nothing more, your Honor.

THE COURT: Any follow-up on that?

MR. SHEEHAN: No, your Honor.

THE COURT: All right. I just have one or two very quick -- hopefully, very quick questions.

You mentioned that you disagreed with one of the authors that the diagnosis of Excited Delirium was a diagnosis of exclusion. I'd like you just to expand on that a bit.

THE WITNESS: When we say diagnosis of exclusion, it means you've ruled out absolutely everything else and, therefore, it has to be asphyxia, it has to be Excited Delirium or something that does not leave any markers at the time of the autopsy.

What I'm saying is that it is not a diagnosis of exclusion. It's a diagnosis based on the behavior of the individual and the investigation of the entire case. Like asphyxia is sometimes referred to as a diagnosis of exclusion because if I put a plastic bag over somebody's head and then take it off, you won't find any markers at autopsy, but you cannot make a diagnosis of asphyxia unless your investigation shows that in the presence of a negative autopsy or other

evidence to indicate there was asphyxia.

In the case of Excited Delirium, just because a person is acting in a bizarre fashion and drops dead on you does not necessarily mean Excited Delirium. There could be other factors involved such that involves the investigation. Excited Delirium, the diagnosis of it is based on the behavior of the individual. As Mr. Sheehan pointed out, you must have delirium and you must have agitation. Those are the two basic things, everything else fits into it.

The diagnosis of exclusion simply means that you have a negative autopsy with nothing else to explain the death. A person can have Excited Delirium and die from trauma. You can have Excited Delirium and die from a ruptured aneurysm in the brain, for example. So that would mean that you don't have any of these things, then the diagnosis of Excited Delirium in that sense becomes a diagnosis of exclusion.

THE COURT: The differential diagnosis process is generally a process of exclusion, isn't it?

THE WITNESS: Yes. In clinical medicine and even in forensic pathology, you make a list of all the possible causes of say, in this case, of death of the individual and then you rule them in or rule them out based upon further investigation and testing.

THE COURT: And again, I don't want to put words in your mouth either, but I suppose, is it possible that when one excludes other causes of death, you are reduced down to several possible causes of death, and then it's a question of probability that one is the cause as opposed to another?

THE WITNESS: No. It's not a matter of probability. It's a matter of having sufficient evidence to show that this is the likely cause of death or varied degrees of assurances from reasonable medical certainty to probability. But if you cannot make a determination of say three different things, then you leave the cause of death as undetermined.

THE COURT: But here we have various medical professionals opining that the cause of death is several different --

THE WITNESS: Right. He either dies from Excited Delirium with heart disease or he dies from heart disease with Excited Delirium. That's the differential diagnosis in this case.

THE COURT: All right. I think that covers it very well. Thank you.

MR. SHEEHAN: Just one question, your Honor.

THE COURT: One question.

RECROSS-EXAMINATION BY MR. SHEEHAN

Q. So, Doctor, ultimately, your opinion in this case is that either Mr. Jackson died from heart disease with Excited Delirium or died from Excited Delirium with heart disease?

A. Correct.

Q. And you can't say which one it was?

A. No. To me, with a reasonable medical certainty, he died from Excited Delirium with heart disease.

Q. You just said that if you can't rule out which one it is, you should put down that cause of death is undetermined?

A. Right.

Q. You can't rule out in this case that it was heart disease with Excited Delirium?

A. I disagree. In my opinion, the preponderance of the evidence is that he died from Excited Delirium.

Q. How can you rule out heart disease?

A. Because he had Excited Delirium, he died very typically with his cardiac arrest being after he was restrained and his initial rhythm was asystole.

THE COURT: Okay. We're not going to go back over everything. I think I've got what I need.

MR. SHEEHAN: Thank you.

THE COURT: Thank you. Doctor, you can step

down. Thank you very much.

I'm going to take this under advisement. I'll give you my ruling, which I think I will -- I don't need a lot of time to do that, but I just can't do it from the bench right now. Okay?

So you'll hear from me very shortly on that, and then we'll go from there.

We can go off the record now.

(Discussion off the record.)

(Court concluded at 11:55 a.m.)

C E R T I F I C A T I O N

I, Anne M. Clayton, RPR, do hereby certify that the foregoing pages are a true and accurate transcription of my stenographic notes in the above-entitled case.

/s/ Anne M. Clayton

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Anne M. Clayton, RPR

July 1, 2011

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Date